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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,751	03/29/2006	**Ralf Krannich**	2080.1131	3824

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EXAMINER	
LEBASSI, AMANUEL	
ART UNIT	PAPER NUMBER
2617	
MAIL DATE	DELIVERY MODE
01/04/2012	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/573,751	KRANNICH ET AL.	
	Examiner	Art Unit	
	AMANUEL LEBASSI	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 October 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *11 and 13-28* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *11 and 13-28* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *29 March 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/06/2011 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 11, 13-28 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 11, 13-28 rejected under 35 U.S.C. 103(a) as being unpatentable over MacDonald et al. US 20040152471 in view of Bonta et al. US 5379447.

Regarding claim 11, MacDonald discloses a method for estimating the position of a subscriber station in a radio communication system (**abstract -**

Methods and apparatus for estimating mobile station location therefore estimating the position of a subscriber station), comprising: receiving reports from the subscriber station at a receive station providing coverage for a radio cell in which the subscriber station is located, each report containing information relating to a signal strength at a location of the subscriber station of at least one receive signal received by the subscriber station and sent by a transmitting station (**paragraph [0012] where a mobile station reports signal strength (RSS) values received from serving base stations**). MacDonald discloses storing the reports in a memory of the radio communication system providing coverage for the radio cell in which the subscriber station is located, such that received signal strength information is stored for signals received at the subscriber station from at least two different transmitting stations **(paragraph [0046] where MAHO list, which contains the signal strengths of the signals that the mobile telephone 120 is receiving over the control channels of nearby cells therefore storing the reports in a memory).** MacDonald discloses receiving a request for position estimation at the receive station of the radio communication system **(paragraph [0048] where specific geographic location of a mobile telephone is determined therefore receiving a request for position estimation**) and estimating the position at a position determining unit taking into account at least two reports stored prior to the request for position estimation **(paragraph [0046] where position is determined taking accounts of RSSI.sub.1, RSSI.sub.2 and etc.)**, wherein the position determining unit

estimates the position of the same subscriber station from which the reports were received and stored **(paragraph [0048] where position is estimated from the received and stored reports)**. MacDonald discloses storing the reports in a memory of the MSC but is silent on storing the reports in a memory of the receive station of the radio communication system.

Bonta teaches storing the reports in a memory of the receive station of the radio communication system **(col. 6, lines 36-43 where communication unit (20) may communicate the RSSI and ID of each detected BTS to the serving BTS (23) therefore storing the reports in a memory of the receive station).**

At the time of invention, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the inventions of MacDonald, and have it include storing the reports in a memory of the receive station of the radio communication system as disclosed by Bonta. The motivation would have been in order the MS to maintain an association with the most appropriate (proximate) BTS as discussed by Bonta (col. 2, lines 32-40).

Regarding claim 13, MacDonald discloses wherein the reports are received and/or stored regularly at specific time intervals (**paragraph [0012] where a mobile station reports signal strength (RSS) values received from serving base stations**).

Regarding claim 14, MacDonald discloses wherein the reports are received and stored regularly at specific time intervals, and the reports are received and stored during both an active connection and in an idle mode (see above).

Regarding claim 15, Bonta teaches wherein the memory stores a first number of reports as a maximum **(col. 6, lines 36-43)**.

Regarding claim 16, MacDonald discloses wherein the position determining unit requests a second number of reports from the receive station (paragraph [0014]).

Regarding claim 17, MacDonald discloses wherein if the number of reports stored is fewer than the second number when the request for position estimation is received, then the receive station stores additional reports until the second number of reports has been stored or until a maximum period of time has expired (paragraph [0014]), if the second number of reports is stored before expiration of the maximum period of time, then the receive station sends the second number of reports prior to the expiry of the maximum period of time (paragraph [0091]), and if the second number of reports cannot be stored before expiration of the maximum period of time, then the base station sends all stored reports after the expiry of the maximum period of time, even if the number of

stored reports remains smaller than the second number of reports **(paragraph [0091]).**

Regarding claim 18, MacDonald discloses wherein the position determining unit estimates position by comparing signal strengths obtained from the reports with signal strengths stored in a signal strength database (**paragraph [0012] where a mobile station reports signal strength (RSS) values received from serving base stations**).

Regarding claim 19, MacDonald discloses wherein each report also contains information relating to a transmitting power used to transmit the at least one receive signal **(paragraph [0091]).**

Regarding claim 20, MacDonald discloses wherein the reports also contain: a transmitting power used by the subscriber station to transmit the report to the receive station (paragraph [0091]), and a receive power at which each report was received by the receive station in each case (paragraph [0112]).

Regarding claim 21, MacDonald discloses wherein the reports are received and stored regularly at specific time intervals, and the reports are

received and stored during both an active connection and in an idle mode **(paragraph [00120 and [0112]).**

Regarding claim 22, MacDonald discloses wherein the memory stores a first number of reports as a maximum (paragraph [0046]).

Regarding claim 23, MacDonald discloses wherein the position determining unit requests a second number of reports from the network device (paragraph [0014]).

Regarding claim 24, MacDonald discloses wherein if the number of reports stored is fewer than the second number when the request for position estimation is received, then the receive station stores additional reports until the second number of reports has been stored or until a maximum period of time has expired (paragraph [0014]),if the second number of reports is stored before expiration of the maximum period of time, then the receive station sends the second number of reports prior to the expiry of the maximum period of time (paragraph [0091]), and if the second number of reports cannot be stored before expiration of the maximum period of time, then the base station sends all stored reports after the expiry of the maximum period of time, even if the number of stored reports remains smaller than the second number of reports (paragraph [0091]).

Regarding claim 25, MacDonald discloses wherein the position determining unit estimates position by comparing signal strengths obtained from the reports with signal strengths stored in a signal strength database (paragraph [0012]).

Regarding claim 26, MacDonald discloses wherein each report also contains information relating to a transmitting power used to transmit the at least one receive signal (paragraph [0091]).

Regarding claim 27, MacDonald discloses wherein the reports also contain: a transmitting power used by the subscriber station to transmit the report to the receive station (paragraph [0091]), and a receive power at which each report was received by the receive station in each case (paragraph [0112]).

Regarding claim 28, MacDonald discloses a receive station for a radio communication system (see fig. 2, radio base station (RBS) 214 therefore a receive station), comprising: a memory for storing the reports, which the receive station providing coverage for a radio cell in which a subscriber station is located has received from the subscriber station, in which the reports in each case contain information relating to a signal strength at a location of the subscriber

station of at least one receive signal received by the subscriber station and sent by a transmitting station, such that received signal strength information is stored for signals received at the subscriber station from at least two different transmitting stations **(paragraph [0046] where MAHO list, which contains the signal strengths of the signals that the mobile telephone 120 is receiving over the control channels of nearby cells therefore storing the reports in a memory).** MacDonald discloses transmitter to transmit, after a request for position estimation has been received at the receive station of the radio communication system **(paragraph [0048] where specific geographic location of a mobile telephone is determined therefore receiving a request for position estimation**) , at least two reports stored prior to receiving the request for position estimation, the reports being transmitted to a position determining unit, in which the position is estimated taking into account the at least two reports **(paragraph [0046] where position is determined taking accounts of RSSI.sub.1, RSSI.sub.2 and etc.**) and a controller to control the receive station so that at least two reports are stored prior to the request for position estimation (**see fig.2, MSC 220 includes a Base station controller that controls radio base station (RBS) 214**) , wherein the position determining unit estimates the position of the same subscriber station from which the reports were received and stored **(paragraph [0048] where position is estimated from the received and stored reports)**. MacDonald discloses storing the reports in a memory of the

MSC but is silent on storing the reports in a memory of the receive station of the radio communication system.

Bonta teaches storing the reports in a memory of the receive station of the radio communication system **(col. 6, lines 36-43 where communication unit (20) may communicate the RSSI and ID of each detected BTS to the serving BTS (23) therefore storing the reports in a memory of the receive station).**

At the time of invention, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the inventions of MacDonald, and have it include storing the reports in a memory of the receive station of the radio communication system as disclosed by Bonta. The motivation would have been in order the MS to maintain an association with the most appropriate (proximate) BTS as discussed by Bonta (**col. 2, lines 32-40**).

Conclusion

1. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Amanuel Lebassi, whose telephone number is (571) 270-5303. The Examiner can normally be reached on Monday-Thursday from 8:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Nick Corsaro can be reached at (571) 272-7876. The fax phone number for

the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Amanuel Lebassi
/A. L./
12/30/2011

/KAMRAN AFSHAR/

Supervisory Patent Examiner, Art Unit 2617